

ABSTRACT OF THE DISCLOSURE

The present invention provides a lapping method utilizing textured and conditioned lapping plates which are most suitable for finishing magnetic heads resulting in improved surface quality less sensitivity to electrical shorts due to smears and reduced surface height difference between the head elements exposed at the slider air bearing surface. The lapping process can proceed in a succession of steps in which a rough lapping phase is followed by a polishing phase that maintains the same mechanical motion between the work piece and lapping plate but utilizes only the lapping plate without abrasives of any kind to polish the work piece surface, and to clean up any deep textured marks resulting from the diamond slurry phase. A conductive liquid is utilized to provide lubrication and to minimize static charge. The lapping process begins with a specifically textured and conditioned lapping plate having no abrasive particles embedded therein or in the slurry. The textured lapping plate grooves lap and polish the ABS surface. Such use of the specifically and controlled grooved lapping plate along with a slurry provides versatility of operation for lapping and polishing of the ABS surfaces and other surfaces which requires soft lapping plate surface materials.